



## **Planning Technical Advisory Committee Meeting (PTAC)**

### **REGULAR MEETING AGENDA**

**July 21, 2004  
10:00 a.m.**

**South Florida Regional Transportation Authority  
Board Room  
800 NW 33<sup>rd</sup> Street, Suite 100  
Pompano Beach, Florida 33064  
*[www.sfrta.fl.gov](http://www.sfrta.fl.gov)***

PTAC MEETINGS ARE SCHEDULED BI-MONTHLY ON THE THIRD WEDNESDAY AT 10:00 A.M. FOR FURTHER INFORMATION CALL ELLA GILBERT AT (954) 788-7900. TIME OF MEETING IS SUBJECT TO CHANGE.

#### **Members**

**Michael Williams, SFRTA  
Jose Mesa, Miami-Dade MPO  
Jennifer Schaufele, Broward MPO  
Randy Whitfield, Palm Beach MPO  
Ruby Hemingway-Adams, MDT  
Catondra Noye, BCT  
Fred Stubbs, Palm Tran  
Gustavo Schmidt, FDOT, District IV  
Nancy Ziegler, FDOT, District IV  
Gary Donn, FDOT, District VI  
Carolyn Dekle, SFRPC  
Michael Busha, TCRPC**

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**Directions to SFRTA: I-95 to Copans Road. Go west on Copans to North Andrews Avenue Ext. and turn right. Go straight to Center Port Circle, which is NW 33rd Street, and turn right. SFRTA's offices are in the building to the right. The SFRTA offices are also accessible by taking the train to the Pompano Beach Station. The SFRTA building is South of the station. Parking is available across the street from SFRTA's offices, at the Pompano Beach Station.**

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**PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC) MEETING**  
**OF JULY 21, 2004**

The meeting will convene at 10:00 a.m., and will be held in the Board Room of the South Florida Regional Transportation Authority, Administrative Offices, 800 NW 33<sup>rd</sup> Street, Suite 100, Pompano Beach, FL 33064.

**CALL TO ORDER**

**ROLL CALL**

**AGENDA APPROVAL** – Additions, Deletions, Revisions

**MATTERS BY THE PUBLIC** – Persons wishing to address the Committee are requested to complete an “Appearance Card” and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

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| <b>CONSENT AGENDA</b> |
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| Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any Committee Member, however, that item may be removed from the Consent Agenda and considered separately. |
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C1 – **MOTION TO APPROVE:**      Minutes of Planning Technical Advisory Committee Meeting of May 19, 2004

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| <b>REGULAR AGENDA</b> |
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| Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired. |
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| <b>INFORMATION / PRESENTATION ITEMS</b> |
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| Action not required, provided for information purposes only. |
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- 11. – **INFORMATION:**    Regional Long Range Transportation Plan (RLRTP) Update
- 12. – **INFORMATION:**    Broward County Transit Master Plan
- 13. – **INFORMATION:**    Fort Lauderdale Downtown Development Authority (DDA) Downtown Transit Link
- 14. – **INFORMATION:**    Jupiter Corridor Alternatives Analysis Update



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| <b>MONTHLY REPORTS</b>                                       |
| Action not required, provided for information purposes only. |

OTHER BUSINESS

1. MOTION TO ELECT: A Chair and Vice-Chair for Fiscal Year 2004-05.

SFRTA EXECUTIVE DIRECTOR REPORTS/COMMENTS

PTAC MEMBER COMMENTS

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this proceeding, must at least 48 hours prior to the meeting, provide a written request directed to the Planning Department at 800 NW 33<sup>rd</sup> Street, Suite 100, Pompano Beach, Florida, or telephone (954) 942-RAIL (7245) for assistance; if hearing impaired, telephone (800) 273-7545 (TTY) for assistance.

Any person who decides to appeal any decision made by the South Florida Regional Transportation Planning Technical Advisory Committee with respect to any matter considered at this meeting or hearing, will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Persons wishing to address the Committee are requested to complete an "Appearance Card" and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.



**MINUTES**  
**SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY**  
**PLANNING TECHNICAL ADVISORY COMMITTEE MEETING**  
**MAY 19, 2004**

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The Planning Technical Advisory Committee (PTAC) meeting was held at 10:00 a.m. on Wednesday, May 19, 2004 in the South Florida Regional Transportation Authority Main Conference Room, 800 NW 33<sup>rd</sup> Street, Suite 100, Pompano Beach, FL 33064.

**COMMITTEE MEMBERS PRESENT:**

Ms. Ruby Hemingway-Adams, Miami-Dade Transit  
Mr. David Korros, FDOT District VI - Alternate  
Mr. John Krane – FDOT District IV- Alternate  
Ms. Christina Miskis, SFRPC – Alternate  
Ms. Contondra Noye, Broward County Transit  
Mr. Fred Stubbs, Palm Tran  
Mr. Randy Whitfield, Palm Beach MPO, PTAC Chair  
Mr. Michael Williams, SFRTA, PTAC Vice-Chair

**COMMITTEE MEMBERS ABSENT:**

Mr. Michael Busha, Treasure Coast Regional Planning Council (TCRPC)  
Mr. Jose Mesa, Miami-Dade MPO  
Ms. Jennifer Schaufele, Broward MPO  
Ms. Nancy Ziegler, FDOT District IV

**ALSO PRESENT:**

Mr. Rick Buckeye, City of Oakland Park  
Mr. Paul Carpenter, Ft. Lauderdale Transportation Management Association  
Mr. Jim Cummings, SFRTA  
Mr. Gill Davis, Broward MPO  
Ms. Kim Delaney, TCRPC  
Mr. Mario Garcia, Miami-Dade Transit  
Ms. Ella Gilbert, SFRTA  
Ms. Jennifer Hart, Herzog  
Ms. Linda Kinney, SFRTA  
Mr. Larry Merritt, FDOT District IV  
Mr. Michael Moore, Miami-Dade MPO  
Mr. Jonathan Roberson, SFRTA  
Mr. Jack Schnettler, PBS&J  
Mr. Dan Glickman, Citizen

**CALL TO ORDER**

The Chair called the meeting to order at 10:02 A.M. The Chair requested a roll call by the Minutes Clerk.



**AGENDA APPROVAL** – Additions, Deletions, Revisions

**Ms. Hemmingway-Adams moved for approval and the motion was seconded by Mr. Williams.**

**The Chair called for further discussion and/or opposition to the motion. Upon hearing none, The Chair declared the motion carried unanimously.**

**MATTERS BY THE PUBLIC** – Persons wishing to address the Committee are requested to complete an “Appearance Card” and will be limited to three (3) minutes. Please see the Minutes Clerk prior to the meeting.

| CONSENT AGENDA   |
|--|
| Those matters included under the Consent Agenda are self-explanatory and are not expected to require review or discussion. Items will be enacted by one motion in the form listed below. If discussion is desired by any PTAC Member, however, that item may be removed from the Consent Agenda and considered separately. |

C1 – MOTION TO APPROVE: Minutes of Planning Technical Advisory  
Committee Meeting of March 17, 2004

**Mr. Stubbs moved for approval and the motion was seconded by Ms. Miskis.**

**The Chair called for further discussion and/or opposition to the motion. Upon hearing none, The Chair declared the motion carried unanimously.**

| REGULAR AGENDA   |
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| Those matters included under the Regular Agenda differ from the Consent Agenda in that items will be voted on individually. In addition, presentations will be made on each motion, if so desired. |

There were no Regular Agenda items at this meeting.

| INFORMATION / PRESENTATION ITEMS                             |
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| Action not required, provided for information purposes only. |

I-1. INFORMATION: Regional Long Range Transportation Plan (RLRTP) Update

The Chair stated that Palm Beach, Broward and Miami-Dade Metropolitan Planning Organizations (MPO's) are working on their 2030 Long Range Transportation Plan (LRTP) updates, including a Regional Long Range Transportation Plan (RLRTP) “chapter” that will be common to all three updates. The Chair added that a Regional Long Range Transportation Plan Committee was formed to develop the regional plan (chapter) and the RLRTP Committee will be developing a list of regionally-significant corridors and prioritized projects. The Chair continued stating that the Committee is also



developing a series of regional goals, objectives and measures of effectiveness for this regional plan. The Chair continued stating that the Committee has been meeting every three weeks since December 2003 and that each of the three MPO's LRTP 2030 updates are scheduled to be completed by December 2004.

The Chair continued stating that the Committee's next step will be to further define the corridors identified as regionally-significant by each individual MPO and the SFRTA and that the South Florida Regional Planning Council (SFRPC) previously drafted a Regional Network map that graphically showed what each MPO and the SFRTA identified as regionally-significant corridors for the region.

The Chair continued stating that the basis of the regional network is to identify the regional connections and once the regional network is developed, the Committee will recommend prioritization and begin identification of financing mechanisms. The Chair continued stating that he had discussions with the Vice-Chair in the past week surrounding funding mechanisms for SFRTA projects and other regional projects identified through the process of developing a regional network.

Ms. Noye inquired about the difference between the process described by the Chair and the determination of "regional project" discussed at the last meeting.

The Chair answered that it's very similar and that the Planning Technical Advisory Committee (PTAC) is determining the definition of a regional project. The Chair continued stating that the RL RTP Committee will incorporate the PTAC suggestions for defining regionally-significant corridors and projects and attempt to incorporate the most relevant comments and suggestions into the RL RTP chapter.

The Vice-Chair added that once the regional network is identified, an analysis of the corridors should be completed which could provide for a definition based on common elements.

The Chair stated that prior to the next meeting, the RL RTP Committee will have the recommended Regional Network prepared for distribution.

The Vice-Chair stated that progress has been made by the RL RTP Committee and recommended that PTAC should consider presenting an information item to the SFRTA Board of Directors on the progress of the regional transportation plan.

Mr. Krane inquired about the date of the next Board meeting.

The Vice-Chair stated that the next SFRTA Board of Directors meeting is June 25, 2004.

Ms. Noye asked if the network that is being developed by the RL RTP Committee would be approved by the PTAC and taken to the SFRTA Board in June. Ms. Noye also asked about the impact the PTAC would have on the final regional network.



The Chair stated that PTAC should recommend the regional network to the RL RTP Committee and that the regional network should be finalized by the time an information item is brought to the SFRTA Board.

The Chair stated that the criteria used in development of the regional network included: service crossing the county line; component of the Florida Department of Transportation (FDOT) Strategic Intermodal System (SIS); connection to the Tri-Rail system and connection to the airports and seaports. The Chair added that the RL RTP Committee also developed a designation of "Premium Transit Services" and that these services may not cross county lines, however they provide significant intra-county trips to important destinations (i.e. State Road 7 Bus Rapid Transit (SR 7 BRT), US 1 bus service, etc.).

The Vice-Chair stated that this Committee must ensure that the criteria being used is all encompassing and that the project criteria used by the Regional Transportation Organization's Transit Analysis Study included connections to the Tri-Rail System or crossing county lines, however these criteria limited consideration of east-west connections. The Vice Chair added that the Committee should review the criteria to ensure it does not preclude East-West Corridors.

Ms. Hemmingway-Adams inquired if the South Dade BRT is considered a regional project based on the criteria presented.

Mr. Stubbs stated the South Dade BRT would be classified as Premium Transit Service and therefore would be considered a regional project.

Ms. Noye stated that the regional project, as it is identified on the map compiled by the SFRPC, should be filtered by the RL RTP Committee again to verify agreement on the regional network.

The Chair stated that one of the primary objectives is to ensure continuity of service on "Premium Transit Service" trips as county lines are crossed and that the RL RTP Committee will distribute maps of the regional network within the next few weeks and would like to obtain feedback from the PTAC.

Ms. Hemmingway-Adams asked that Mario Garcia address the PTAC about relevant Miami-Dade Transit (MDT) projects.

Mr. Garcia stated that MDT is working on the North Corridor/27<sup>th</sup> Avenue Project in Miami-Dade County and would like the project included as a regional project with the possibility of the North Corridor continuing into Broward County via University Drive. Mr. Garcia continued stating that the Miami-Dade County portion of the project should be under construction within the next two to three years and the region should seize the opportunity to connect Miami-Dade and Broward counties on this corridor by identifying 27<sup>th</sup> Avenue and University Drive as part of the regional network.

Mr. Krane stated that the 27<sup>th</sup> Avenue/University Drive corridor is part of the "needs" plan for the regional network.



Mr. Garcia stated that the Bus Rapid Transit (BRT) in Broward County is a good project that will connect to the North Corridor Project but it is now going east and that MDT would like to start thinking longer term to have a connection along University Drive up to I-595 and connects to other projects that are now in the planning stages in Broward County.

The Vice-Chair stated that if the North Corridor in Miami-Dade County and University Drive in Broward County is identified as a regional corridor, then an Alternative Analysis can be performed to identify what transportation investments are needed in the long-term on the corridor and that strategic segments could be implemented. The Vice-Chair continued by stating that this can only occur if the region agrees that 27<sup>th</sup> Avenue/University Drive is a regionally-significant corridor.

Mr. Stubbs suggested identification of major corridors regardless of the absence of planned projects on the corridor and that planned projects should to be identified when they are specific to a corridor.

Ms. Hemingway-Adams stated she would like to call for a vote to take the criteria to the Board next month.

The Chair asked for a motion.

Ms. Noye stated that the Committee should include transit-supportive land use as a criteria.

The Vice-Chair stated that a land use criteria should be included and that the RL RTP Committee and the SFRTA should consider working with the Regional Planning Councils to develop transportation supportive land uses or “best practices” that can be implemented along the regional corridors. The Vice Chair further stated that these Best Practices would consider Community Redevelopment Agency (CRA) standards, transportation assessment districts, Miami-Dade Rapid Transit zones and other transportation supportive initiatives in the other counties and across the country would be analyzed to develop standards for land use along the regional significant corridors

Ms. Noye stated there are a number of areas in South Florida that don’t have the land use plans in place today that support transit needs for the future. Ms. Noye continued stating that it might take 30 years for implementation of coordinated land use and transportation.

Ms. Hemmingway-Adams agreed with the addition of land use as criteria.

The Chair asked for any other discussion.

Ms. Miskis requested an update from the last PTAC meeting concerning the Florida East Coast Railroad (FEC) corridor and negotiations that were underway concerning the hiring of consultants to develop an Alternatives Analysis (AA) of the corridor.

The Vice-Chair stated that the District IV Office of the Florida Department of Transportation (FDOT) was taking the lead on examining the implementation of



premium transit along the entire FEC corridor in South Florida. The Vice-Chair continued stating that the latest information was that FDOT was going to advertise for the project which would incorporate the Miami-Dade County contact with an existing consulting firm with an anticipated Notice to Proceed in late summer.

Mr. Krane stated that Mr. Scott Seeburger from the FDOT District IV Office will be the project manager.

The Chair asked about the relationship between the existing Jupiter Corridor Alternatives Analysis (AA) Study and the eventual FEC Corridor Study.

The Vice-Chair stated that the Jupiter Corridor Alternatives Analysis started nearly a year ago as the project was included in the Palm Beach MPO and SFRTA/Tri-Rail LRTPs. The Vice-Chair continued stating that SFRTA is having discussions with FDOT to determine the study limits for the FDOT study and that it is quite possible that the FDOT AA will examine the segment between the West Palm Beach Intermodal Station (WPB) and downtown Miami, allowing the Jupiter Corridor to be a related but separate segment in terms of transit development. The Vice-Chair continued stating that it is envisioned that the FEC corridor would be developed in strategic segments. The Vice-Chair added that if the Jupiter Corridor AA concludes that Commuter Rail is the selected mode between WPB and the Town of Jupiter, it would make sense for the FDOT study to terminate at the WPB Intermodal Facility. The Vice-Chair continued stating that FDOT will coordinate and analyze the impact of implementing the Jupiter Corridor AA with the outcome of the entire corridor AA.

Ms. Hemingway-Adams stated that the RL RTP is at a good stage for PTAC to get suggestions/recommendations on the criteria from the SFRTA Board, because the Board should have input on how the plan should proceed.

**Ms. Hemmingway-Adams offered a motion to provide an update of the RL RTP, with the inclusion of land use as part of the criteria, to the next Board meeting. The motion was seconded by Mr. Stubbs.**

**The Chair called for further discussion and/or opposition to the motion. Upon hearing none, The Chair declared the motion carried unanimously.**

The Chair asked if there was any further discussion on the Regional Long Range Plan.

There was none.

## **I.2 – INFORMATION: Florida East Coast Railroad Economic Impact Analysis**

The Chair stated that the next item is the Florida East Coast Railroad Economic Impact Analysis.

Ms. Miskis introduced Mr. Michael O'Connell, South Florida Regional Planning Council (SFRPC) Economist, who provided the Committee with information on the transit software related to the REMI model which is an economic forecasting model software.



Ms. Miskis continued stating that the SFRPC is hoping to use the model for more detail land use analysis as the region advances more regional transportation planning projects.

Ms. Noye inquired about the increase in input for public transportation and impact upon transportation in general and noted the FEC Corridor that is currently used solely by the manufacturing industry for movement of goods; however implementation of passenger service along the Corridor is currently under consideration.

Mr. O'Connell stated that the FEC Corridor could move some freight operations to off hours and operate passenger service during peak hours and further stated that the flexibility of the REMI model permits the region to analyze the opportunity cost of shifting from passenger service to other more commercial-oriented services on the corridor and the impact of jobs in the region.

The Chair inquired on the impact of the increase in cost of gasoline, on a short term basis.

Mr. O'Connell replied that Governor Bush requested an impact analysis on the effect of increased gas prices prior to the commencement of the Iraqi War and since gas prices are impacted nationally, the REMI model utilized the national forecast variables in addition to local/regional forecast data.

The Vice-Chair thanked Mr. O'Connell for the presentation and requested clarification on statements regarding the FEC Corridor and State Road 7. The Vice-Chair further stated that he encouraged the use of the economic model to help identify the regional transportation corridors and that the model can produce data which will aid decision makers in understanding the benefits of a project. The Vice-Chair requested an explanation of the directives the SFRPC is seeking from the Committee and the SFRTA Board.

Mr. O'Connell stated that the SFRPC is dependent on travel demand data from FDOT transportation model and that this data is input into the REMI model; additionally, the SFRPC would like to become involved in, and will certainly enhance the FEC study when appropriate. Mr. O'Connell continued stating that the model can be used to advocate projects with decision makers by detailing the economic benefit a transportation project can provide to the affected community such as increased employment, increase personal income, tax revenue increases, etc. Mr. O'Connell further stated that the SFRPC is currently leasing the software and the Council would like to own the software.

Mr. Merritt requested clarification on the uniformity of the data used by the various models in the region and reiterated the benefit of the REMI model in identifying the added value of transportation investments on land use for use when pursuing funding opportunities. Mr. Merritt continued stating that some of this value can be incorporated into the capital and operating costs of a project, allowing the region to make a better case for a project.

The Chair inquired about sensitivity or magnitude of projects analyzed by the model.



Mr. O'Connell responded that the model is being built now and should be ready soon and a sensitivity analysis is one of the things that will run once the model is complete.

Mr. Krane asked about the credibility of the model on a regional basis. Mr. Krane continued stating that the Federal Transit Administration (FTA) approves all transportation forecasting models utilized in funding requests and inquired if a similar agency responsible for reviewing and approving this and other regional economic model.

Mr. O'Connell stated that the REMI model is used by various federal agencies in other states and data from public studies utilizing the REMI model have been recognized by the FTA and other agencies.

Mr. Krane inquired about Mr. McConnell's economic modeling services being pro bono since he will be working on other projects for the Council.

Mr. McConnell responded negatively and stated that the SFRPC obtained grant money to study the effectiveness of the REMI model and is now interested in acquiring regional support to purchase the software.

Ms. Noye asked if the model is currently being leased.

Mr. O'Connell stated that the model is being leased by the SFRPC for 6 months and that the first 3 months will be credited toward the purchase price and that the SFRPC is seeking approval to purchase the model.

Mr. Carpenter inquired about the commencement of analysis from the model.

Mr. O'Connell stated that the model will arrive next week and analysis will begin on data provided by FDOT and results will be distributed to FDOT, the MPOs and other stakeholders for technical feedback.

Mr. Krane asked if the model is state-wide and being validated to the South Florida region.

Mr. McConnell stated that the model includes 7 counties and the remainder of the state - 8 regions, which includes Monroe, Miami-Dade, Broward, Palm Beach, Martin, St. Lucie and Indian River.

Mr. Roberson inquired about the use of the model for the variables important to transit development and how models tend to miss key variables unique to transit development.

Mr. O'Connell stated that he would provide a response after investigating the model further and that the first model will not have a strong transit component but that current efforts are being made to incorporate more detailed transit variables.

Chair asked for any other comments or questions. There were none.



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| <b>MONTHLY REPORTS</b>                                       |
| Action not required, provided for information purposes only. |

The Chair asked if there were any monthly reports. There were none.

OTHER BUSINESS

SFRTA EXECUTIVE DIRECTOR REPORTS/COMMENTS

Mr. Williams stated that the Executive Director was unable to attend the PTAC meeting as a result of the Federal Transit Administration (FTA) Quarterly Review Meeting.

PTAC MEMBER COMMENTS

ADJOURNMENT

There being no further business to discuss, the Chair adjourned the meeting at 11:30 a.m.



SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY  
PLANNING TECHNICAL ADVISORY COMMITTEE (PTAC)  
MEETING: JULY 21, 2004

INFORMATION ITEM REPORT

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☒ Information Item

☐ Presentation

REGIONAL LONG RANGE TRANSPORTATION PLAN (RLRTP) UPDATE

SUMMARY EXPLANATION AND BACKGROUND:

As previously reported, the three South Florida MPOs agreed to a “bottom up” plan approach to preparing a Regional Long Range Transportation Plan (RLRTP) for the 2030 Update with each MPO developing a long range plan with local interests and emphasis providing guidance. A common element to be included in each plan would be prepared with regional projects and priorities drawn from the respective plans. This common element will be adopted by each MPO during the adoption of the local plan late this year.

Each MPO is proceeding with the update of its LRTP to 2030. All plans are at approximately the same stage of development. Initial determinations of Transportation Needs are underway using the 2030 forecasts of travel demand in each respective County. Available financial resources have also been projected for use in developing the required Cost Feasible Plan. Each MPO is developing alternatives for the preparation of the Cost Feasible Plan. The alternatives include versions with a highway emphasis, one with more of a transit emphasis and another alternative that balances highway and transit projects.

The RLRTP is also moving forward. The RLRTP Committee has continued to refine a list of potential regional transportation corridors and facilities from each county and the SFRTA to be combined and reviewed for compatibility. These corridors/facilities were identified by each MPO and the SFRTA using common regional significant definition criteria such as:

- Crossing the county line;
- Inclusion on the Strategic Intermodal System;
- Connection to Tri Rail;
- Connection to airport/seaport;
- Provision of Premium Transit Service;
- Transit Supportive Land Use.

This information has been compiled and mapped to review compatibility and continuity. An early draft of the lists and map were provided to the RTA Board in June.

(Continued on page 2)

EXHIBITS ATTACHED:    N/A



REGIONAL LONG RANGE TRANSPORTATION PLAN COMMITTEE UPDATE

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SUMMARY EXPLANATION AND BACKGROUND: (Continued)

The RL RTP Committee has also discussed regional land use and transportation study needs for future planning activities. The South Florida Regional Planning Council (SFRPC) and the Treasure Coast Regional Planning Council (TCRPC) have proposed to provide technical support in the areas of regional transportation corridor land use analysis and consensus building, economic and demographic analysis and alternative project financing through other value capture strategies.

The RL RTP Committee is continuing to meet on a 3-4 week schedule. As the MPOs near the completion of their Cost Feasible Plans, candidate regional corridors and subsequent projects will be identified. Regional financial resources will also be identified for use in setting priorities for this regional component.



REGIONAL LONG RANGE TRANSPORTATION PLAN COMMITTEE UPDATE

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|------------------|---|---|
| Agency:          | <br>South Florida Regional<br>Transportation Authority | <br>Date |
| Project Manager: | <br>Jonathan Roberson                                  | <br>Date  |
| Chair:           | <br>Randy Whitfield                                    | <br>Date  |



SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY  
PLANNING AND TECHNICAL ADVISORY COMMITTEE (PTAC)  
MEETING: JULY 21, 2004

AGENDA ITEM REPORT

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☒ Information Item      ☐ Presentation

BROWARD COUNTY TRANSIT MASTER PLAN

SUMMARY EXPLANATION AND BACKGROUND:

Broward County Transit (BCT) is developing a comprehensive twenty-five year Transit Master Plan to position Broward County's transit system to assist in the progressive and sustained growth of Broward County, Florida. The goal of this plan is to improve mass transit services to increase ridership, alleviate traffic congestion and improve air quality. Current updates on the proposed plan are shown in Exhibits 1-3.

Major tasks include data collection development of a Geographical Information System (GIS) database; identification and recommendation of evaluation standards and performance criteria; analysis of existing, short-range and long-range transit conditions in Broward County; identification and evaluation of all transit related services, transit infrastructure/capital improvements and the development and prioritization of recommended projects for the development of the transit system over the next twenty-five years.

A key element of the plan is educating the public and key decision-makers in Broward County on the importance of transit-supportive development policies and the need to focus the burgeoning development of Ft. Lauderdale and other communities in the County into areas that can be served efficiently and effectively by high-capacity transit service. BCT will work with local communities to develop an alternate distribution of population and employment to demonstrate the benefits of transit service to such transit-supportive development strategies. BCT is also developing a marketing and financial plan for the purposes of building stakeholder support to establish a dedicated local funding source for major transit investments shown on the Major Capital Improvements Map (Exhibit 2).

The BCT Master Plan clearly identifies a number of regionally significant north-south and east-west corridors in Broward County that will require enhanced or premium transit service by 2030 based on the plan's evaluation criteria (see Exhibit 1). The corridors and premium transit services identified compliment the ongoing Regional Long Range Transportation Plan efforts of the three MPOs, FDOT and the SFRTA.


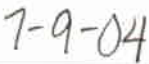
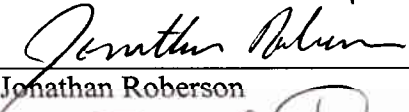
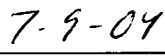
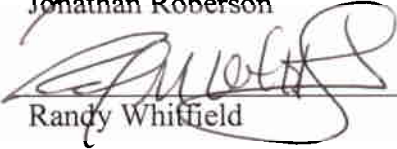
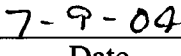
EXHIBITS ATTACHED:

- Exhibit 1 - Targeted Corridors for Transit Improvements
- Exhibit 2 - Major Capital Improvements Map
- Exhibit 3 - Major Service Improvements Map



BROWARD COUNTY TRANSIT MASTER PLAN

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|                  |   |  |
|------------------|---|--|
| Agency:          | <br>Broward County Transit | <br>Date |
| Project Manager: | <br>Jonathan Roberson      | <br>Date |
| Chair:           | <br>Randy Whitfield        | <br>Date |



## BCT Transit Master Plan

### Targeted Corridors for Transit Improvements

| <b>Transportation Corridor</b>                            | <b>TDP<br/>2005 – 2009</b>                             | <b>2005 – 2015</b>   | <b>2015 – 2030</b>   |
|---|--|--|--|
| <b>Major East-West Corridors</b>                          |  |  |  |
| <b>Sample Road</b><br>(Bus Route 34)                      | No changes to existing service                         | BRT Corridor Study   | BRT Implementation   |
| <b>Atlantic Boulevard</b><br>(Bus Route 35-TDP)           | New Bus Route 35                                       | Local Bus Headway Improvements   | Local Bus Headway Improvements   |
| <b>Commercial Boulevard</b><br>(Bus Route 55)             | Local Bus 30-minute headway                            | Local Bus Headway Improvements   | Local Bus Headway Improvements   |
| <b>Oakland Park Boulevard</b><br>(Bus Route 72)           | Local Bus 10-minute headway                            | BRT Corridor Study   | BRT Implementation   |
| <b>Sunrise Boulevard</b><br>(Bus Route 44-TDP)            | New Bus Route 44                                       | Local Bus Headway Improvements   | BRT Implementation US 441 to A1A   |
| <b>I-595/Broward Boulevard</b> (East of US 441)           | Corridor under study for High Capacity Transit service | High Capacity Transit service  | High Capacity Transit service  |
| <b>Broward Boulevard</b><br>(West of U.S. 441 – Route 22) | No changes to existing service                         | Express Bus Service with frequent service, feeding high capacity transit at US 441 | Express Bus Service with frequent service, feeding high capacity transit at US 441 |
| <b>Griffin Road</b><br>(Bus Route 202 – TDP)              | New Bus Route 202                                      | Local Bus Headway Improvements   | Local Bus Headway Improvements   |
| <b>Stirling Road</b><br>(Bus Route 201 – TDP)             | New Bus Route 201                                      | Local Bus Headway Improvements   | Local Bus Headway Improvements   |
| <b>Sheridan Street</b><br>(Bus Route 12)                  | Local Bus 30-minute headway                            | Local Bus Headway Improvements   | Local Bus Headway Improvements   |
| <b>Pines/Hollywood</b><br>(Bus Route 7)                   | Local Bus 20-minute headway                            | BRT Corridor Study   | BRT Implementation   |



## BCT Transit Master Plan Targeted Corridors for Transit Improvements

| <b>Transportation Corridor</b>  | <b>TDP<br/>2005 – 2009</b>   | <b>2005 – 2015</b>  | <b>2015 – 2030</b>  |
|---|--|---|---|
| <b>Pembroke Road</b><br>(Bus Route 5)                                 | Local Bus<br>30-minute headway                                     | Route straightening<br>Route 36, additional<br>service during peak<br>periods if needed   | Local Bus Service<br>Headway Improvements<br>during peak periods,<br>connections to<br>Intercounty Connector                        |
| <b>Hallandale<br/>Boulevard/Miramar<br/>Parkway</b><br>(Bus Route 28) | Local Bus<br>20-minute headway                                     | Local Bus<br>Headway<br>Improvements  | Local Bus Service<br>Headway Improvements<br>during peak periods,<br>connections to<br>Intercounty Connector,<br>BRT Corridor Study |
| <b>Major North-South Corridors</b>                                    |  |   |   |
| <b>Weston Road</b><br>(Bus Route 22)                                  | (Currently operates<br>on 20-minute<br>headways)                   | Restructure Route 22<br>to serve as feeder<br>route for High Capacity<br>Transit in the I-595<br>Broward Boulevard<br>Corridor. | Improve Service<br>Frequency on Route 22  |
| <b>136<sup>th</sup> Avenue</b><br>(Bus Route 23)                      | No changes to<br>existing service                                  | New Local Bus Service<br>to connect to east-west<br>high capacity transit   | Improve Service<br>Frequency on New<br>Local Bus Service  |
| <b>Flamingo Road</b>  | No plans for transit<br>service                                    | New Local Bus Service<br>to connect to east-west<br>high capacity transit   | Improve Service<br>Frequency on New<br>Local Bus Service,<br>possible BRT Corridor<br>Study   |
| <b>Hiatus Road</b>  | No plans for transit<br>service                                    | New Local Bus Service<br>to connect to east-west<br>high capacity transit   | Improve Service<br>Frequency on New<br>Local Bus Service,<br>possible BRT Corridor<br>Study   |
| <b>Nob Hill Road</b>  | No plans for transit<br>service                                    | New Local Bus Service<br>to connect to east-west<br>high capacity transit   | Improve Service<br>Frequency on New<br>Local Bus Service  |
| <b>University Drive</b><br>(Bus Route 2)                              | Local Bus<br>15-minute headway                                     | BRT Corridor Study  | BRT Implementation  |
| <b>Davie Road</b><br>(Bus Route 9)<br>(Bus Route 12)                  | Local Bus<br>30-minute headway<br>for both Route 9 and<br>Route 12 | Eliminate Route 12<br>(which was replaced by<br>Sheridan) and improve<br>Service Frequency on<br>Route 9                        | No major change   |



## BCT Transit Master Plan Targeted Corridors for Transit Improvements

| Transportation Corridor         | TDP<br>2005 – 2009  | 2005 – 2015   | 2015 – 2030   |
|---------------------------------|---|---|---|
| <b>U.S. 441/SR 7</b>            | Transit Bridge Study under development  | Transit Bridge-BRT  | LRT Implementation  |
| <b>SFRTA/Tri-Rail</b>           | Tri-Rail Improve to 20-minute headway   | Tri-Rail Improve to 20-minute headway                                 | No Major Changes  |
| <b>I-95</b>                     | Existing HOV lanes  | HOV Improvements, including HOV flyover ramps                         | HOV Improvements  |
| <b>FEC</b>                      | Corridor study of future freight/passenger multi-use service with High Capacity Transit | Future freight/passenger multi-use service with High Capacity Transit | Future freight/passenger multi-use service with High Capacity Transit |
| <b>U.S. 1<br/>(Bus Route 1)</b> | Local Bus 10-minute headway   | Route 1 Service Frequency Improvements and New Express Service        | BRT Corridor Study  |
| <b>A1A</b>                      | Local Bus 20-minute headway   | Improved transit stops in areas served by transit                     | Local Bus Service Improvements  |

### Local Circulator Services

- Fort Lauderdale
- Hollywood

### Priority Park-and-Ride Locations

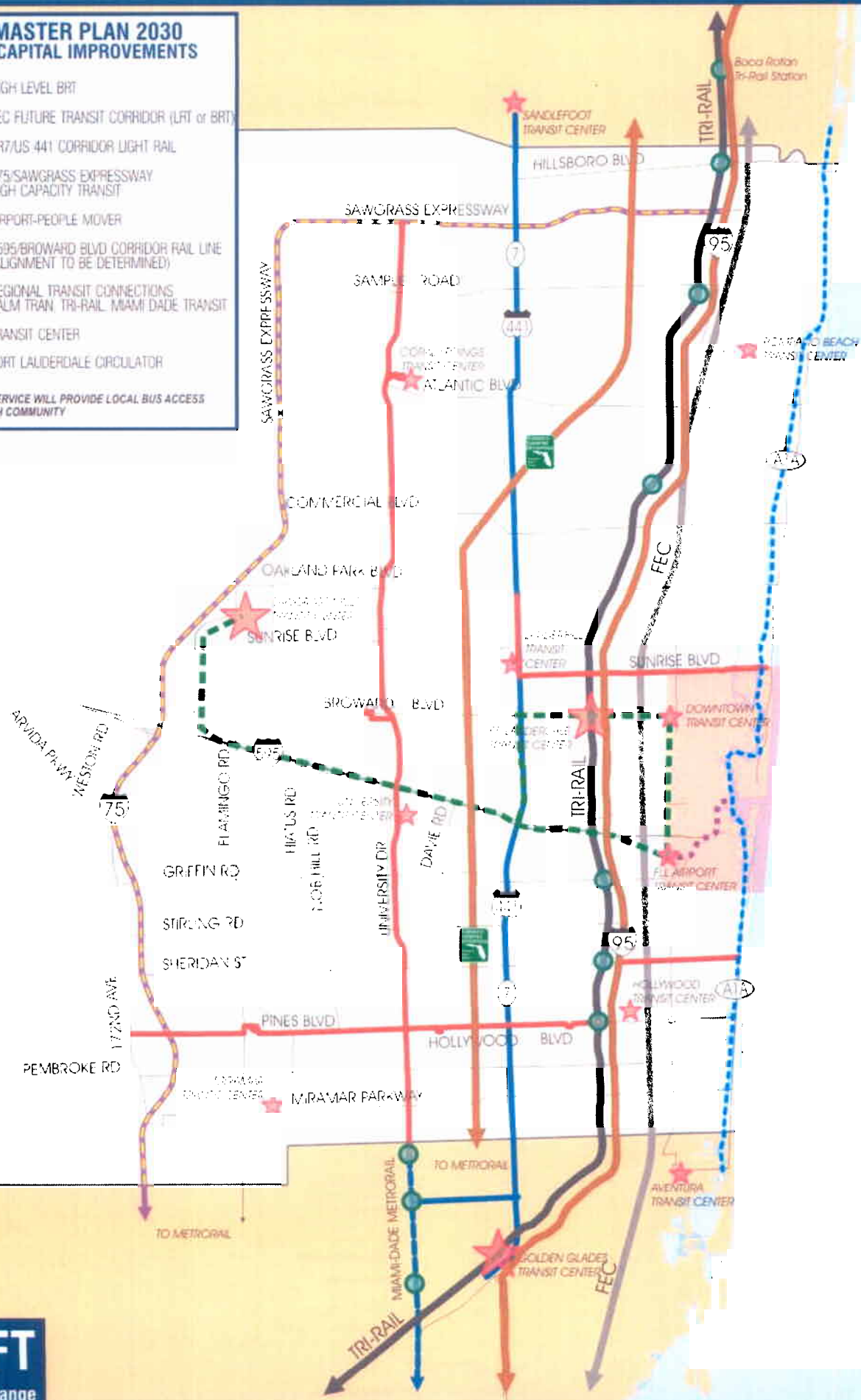
- I-75 Interchanges
- Sawgrass Expressway
- I-95 Interchanges



# BCT MASTER PLAN 2030 MAJOR CAPITAL IMPROVEMENTS

- HIGH LEVEL BRT
- FEC FUTURE TRANSIT CORRIDOR (LRT or BRT)
- SR7/US 441 CORRIDOR LIGHT RAIL
- I-75/SAWGRASS EXPRESSWAY HIGH CAPACITY TRANSIT
- AIRPORT-PEOPLE MOVER
- I-595/BROWARD BLVD CORRIDOR RAIL LINE (ALIGNMENT TO BE DETERMINED)
- REGIONAL TRANSIT CONNECTIONS  
PALM TRAN, TRI-RAIL, MIAMI DADE TRANSIT
- TRANSIT CENTER
- FORT LAUDERDALE CIRCULATOR

COMMUNITY BUS SERVICE WILL PROVIDE LOCAL BUS ACCESS  
THROUGHOUT EACH COMMUNITY



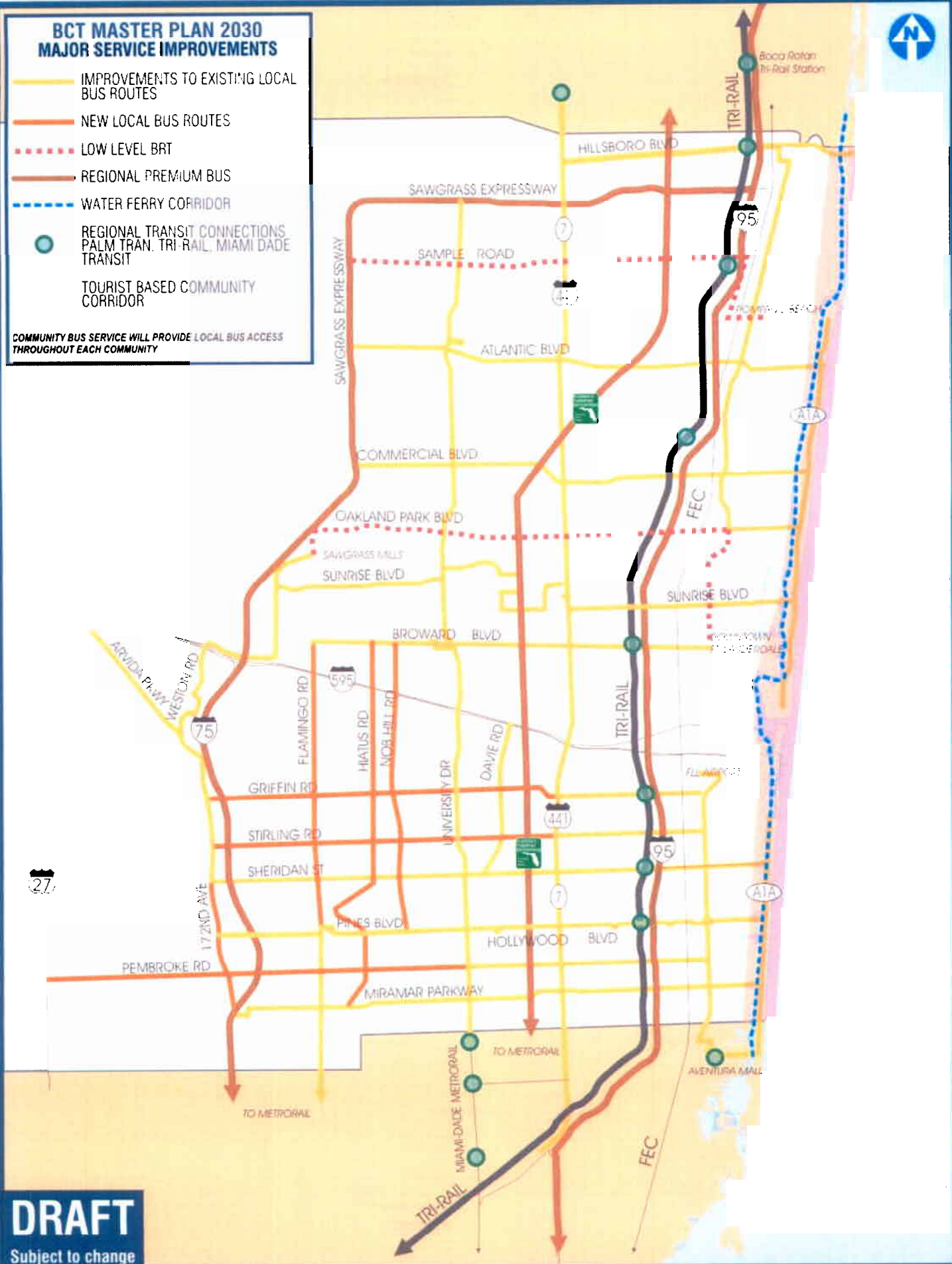
**DRAFT**  
Subject to change



# BCT MASTER PLAN 2030 MAJOR SERVICE IMPROVEMENTS

- IMPROVEMENTS TO EXISTING LOCAL BUS ROUTES
- NEW LOCAL BUS ROUTES
- LOW LEVEL BRT
- REGIONAL PREMIUM BUS
- WATER FERRY CORRIDOR
- REGIONAL TRANSIT CONNECTIONS  
PALM TRAN, TRI-RAIL, MIAMI DADE TRANSIT
- TOURIST BASED COMMUNITY CORRIDOR

COMMUNITY BUS SERVICE WILL PROVIDE LOCAL BUS ACCESS  
THROUGHOUT EACH COMMUNITY





☒ Information Item      ☐ Presentation

EXHIBITS ATTACHED: Exhibit 1 - Project Description/Details  
Exhibit 2 - Broward County Board of County Commissioners May Agenda Item



FT. LAUDERDALE DOWNTOWN DEVELOPMENT AUTHORITY (DDA) DOWNTOWN  
TRANSIT LINK UPDATE

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SUMMARY EXPLANATION AND BACKGROUND: (Continued)

On May 18, 2004, Broward County approved a motion to participate with the DDA as the sponsor of the Downtown Transit Link, committing to operate the transit service once constructed (Exhibit 2). DDA efforts have resulted in the inclusion of the Downtown Transit Rail Link in the current version of the House Bill for federal transportation reauthorization, which is scheduled to go to conference committee sometime this summer. The legislation, entitled TEA-LU in the House (HR 3550, Transportation Equity Act – A Legacy for Users) and SAFE-TEA in the Senate (S 1072, Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003), is passed every six years. FDOT has agreed to fund \$9.5 million of the total capital cost of the project.

DDA staff is currently working on the following activities for this project:

- Coordinating with Broward MPO to get the Downtown Transit Link in their Transportation Improvement Program (TIP) and the Long Range Transportation Plan (LRTP) 2030 Update as well as Broward County Transit's Master Plan Update;
- Assisting Broward County staff with the development of a Request for Qualifications (RFQ) to enter into Preliminary Engineering (PE) and seek Federal Transit Administration (FTA) New Starts funding;
- Coordinating with Congressional offices to get further funding support for the project;
- Nearing the implementation date for running a trolley on this route as an interim solution.



FT. LAUDERDALE DOWNTOWN DEVELOPMENT AUTHORITY (DDA) DOWNTOWN  
TRANSIT LINK UPDATE

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Agency:

Chris White 7/8/07  
Ft. Lauderdale Downtown  
Development Authority Date

Project Manager:

Jonathan Roberson 7/8/07  
Jonathan Roberson Date

Chair:

Randy Whitfield 7-9-07  
Randy Whitfield Date



## EXHIBIT 1

### **Role of the Downtown Rail Link in providing local circulation and transit access:**

- Distributes regional transit passengers to their destinations
- Provides alternative means to circulate in Downtown
- Provides access between residential and employment
- Provides access between employment and restaurants/retail
- Provides access for entertainment and tourism

### **Areas and riders being served during different timeframes and for different functions:**

- Commuter transit access between downtown residential and downtown employment
- Commuter transit access to downtown employment and the Broward County Downtown Campus Master Plan through a future interface with FDOT's Transit Connector from Tri-Rail to Downtown
- Lunchtime transit access serving the financial district employees, university/community college students and faculty and city, county and federal employees
- Entertainment transit access to retail, restaurants and museums on 2nd Street and Las Olas

### **Consistency and coordination with other transit plans and programs under development:**

- Consistent with the north-south and east-west transit vision included in the City's *Consolidated Downtown Master Plan*.
- Included in the *Downtown Transit/Pedestrian Master Plan*.
- Provides enhanced transit on corridors which have already been designated by FTA as eligible (under the LONP) for the protection of local investments for future federal funding.
- Actions are underway to include the Downtown Rail Link in the MPO TIP, the MPO LRTP and the BCT Master Plan.
- Coordination is ongoing with Broward County based upon their role as transit operator, and based upon the development of the BCT Master Plan.
- Coordination with FDOT is ongoing regarding future station connectivity with the Transit Connector Project from Tri-Rail to Downtown.

Coordination with FDOT is ongoing regarding the East-West Central Broward Transit Alternatives Analysis.



PREVIOUS ITEM

**BROWARD COUNTY  
BOARD OF COUNTY COMMISSIONERS**

NEXT ITEM



## AGENDA ITEM # 20

Meeting Date

05/18/04

Page 1 of 2

|   |  |
|---|--|
| <b>Requested Action</b>   | <small>(Identify appropriate Action or Motion, Authority or Requirement for item and identify the outcome and/or purpose of item.)</small>   |
| <p>MOTION TO DIRECT STAFF to work with the City of Fort Lauderdale and the Regional Transportation Authority to pursue federal authorization of the Downtown Transit Link with Broward County as the project sponsor.</p> <p><b>Why Action is Necessary:</b> Provides staff direction to move forward on this project.</p> <p><b>What Action Accomplishes:</b></p> <p>Is this Action Goal Related? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>   |  |
| <b>Summary Explanation/Background</b>   | <small>(The first sentence includes the Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item. Identify how item meets Commission Challenge Goal.)</small> |
| <p>The Downtown Transit Link has been developed by the Downtown Development Authority in partnership with the City of Fort Lauderdale, the Metropolitan Planning Organization (MPO), the Florida Department of Transportation and the South Florida Regional Transportation Authority. The DDA is seeking County participation and sponsorship, and Commissioner Rodstrom has asked that the item be brought to the Board for consideration.</p> <p>The project as currently configured refines recommendations made in the originally titled Downtown RAC Phase I. The recommendations include: consolidation of redundant transit service delivery, identification of the most practical and available rail technology available for implementation in a downtown environment, identification of pedestrian improvements complementary to proposed transit routes, protection of local investments for future federal funding eligibility and the creation of a finance and implementation strategy to support the cost of future transit improvements.</p> <p>The partners are seeking an amendment to the MPO's current Transportation Improvement Plan (TIP), and the MPO will consider that request on May 13, 2004. Accelerated approval is being sought primarily because of the timing of the federal transportation reauthorization bill, which is scheduled to go to conference committee sometime this summer. The legislation, called TEA-LU in the House (HR 3550, Transportation Equity Act – A Legacy for Users) and SAFE-TEA in the Senate (S 1072, Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003), is passed every six years. This legislation provides the framework and authorization for all large transportation</p> |  |

|   |  |                                      |
|---|--|--------------------------------------|
| <b>Authorized Signature</b>   |  | <b>Scheduling</b>                    |
| <small>(Signature confirms that required approvals from other agencies have been received – e.g. Purchasing, Budget, Risk Mgmt, Attorney)</small> |  | <small>County Admin Initials</small> |
| Signature:  | Date:      Type: <b>Name, Title, Agency, and Phone</b>                   |                                      |
|   | Pamela Madison, Assistant to the<br>County Administrator<br>954-357-7577 |                                      |
| Source of additional information: Type Name, Agency, and Phone  |  |                                      |



Continued

Page 2 of 2

projects, including transit systems, and allows for expedited appropriations. The House version of the bill includes an authorizing provision for this project, which would allow for federal participation in the alternatives analysis and preliminary engineering portion of the project. However, the partnership must provide the appropriate documentation, including sponsorship commitments, inclusion on the MPO and the FDOT TIP, for the provision to remain in the conference version of the bill.

Broward County's sponsorship participation will be through operation of the transit service once constructed. The other sponsors will fund the construction and infrastructure.

**Fiscal Impact/Cost Summary**

(Include projected cost, approved budget amount and account number, source of funds, and any future funding requirements)

N/A

**Exhibits Attached** (copies of original agreements)

(Please number exhibits consecutively.)

Exhibit 1 – 3 page DDA Summary, including description, map and cost estimates

Exhibit 2 – Authorization language from HR 3550, TEA-LU

| Document Control   | Commission Action   |
|--|---|
| Executed original(s) for permanent record<br>(Number): _____   | <input type="checkbox"/> APPROVED <input type="checkbox"/> DENIED |
| Executed copies return to:<br>(Number): _____<br>Other instructions (Include name, agency, and phone): _____ | <input type="checkbox"/> DEFERRED<br><br>From: _____<br>To: _____ |



## EXHIBIT 1

**DOWNTOWN DEVELOPMENT AUTHORITY**

101 Northeast Third Avenue, Suite 350  
Fort Lauderdale, Florida 33301  
(954) 463-6574 • FAX (954) 463-8412  
E-mail: [ddafla@bellsouth.net](mailto:ddafla@bellsouth.net)  
[www.ddaflaud.com](http://www.ddaflaud.com)

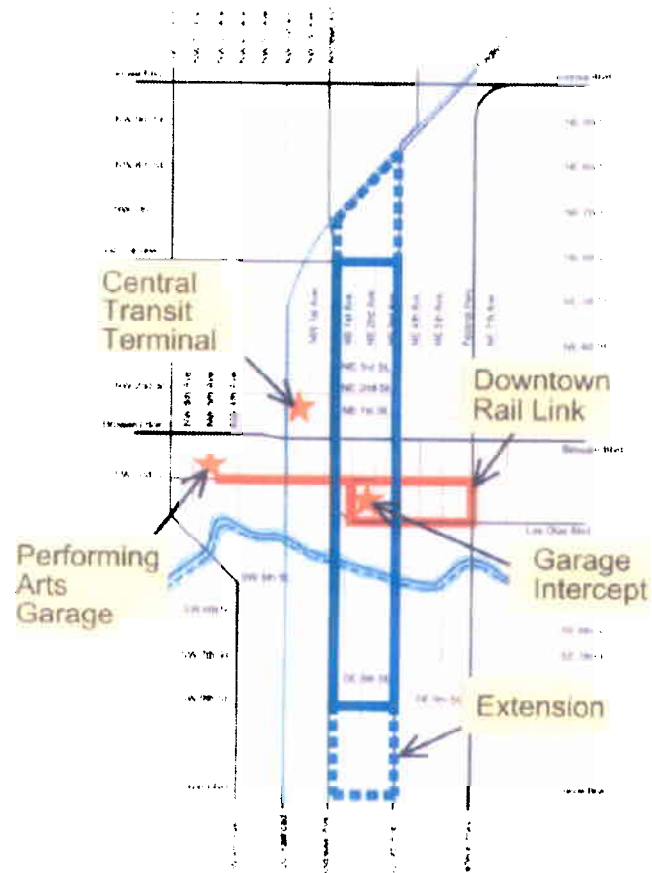
**DOWNTOWN LIGHT RAIL PROJECT**

The DDA has coordinated a multi-governmental Downtown Transit Master Plan. The plan has identified, through the appropriate governmental agencies, regional and community connections to and within the downtown. One important project identified is the Downtown Light Rail Circulator. The circulator consists of an east/west and north/south rail system. The light rail system is designed to provide a convenient means of moving people around downtown without the need to use an automobile. These downtown routes will link governmental, office, retail, entertainment, cultural, and residential destinations, along with key parking facilities. The Judicial Complex, as well as Broward County's proposed downtown campus are important elements of the rail circulator.

There are three elements that make up the DDA rail project. The first element is the transit vehicle, which will be an environmental friendly combustion vehicle that travels on a fixed rail. The second element is enhanced streetscape. This includes wider sidewalks, paving patterns, cross walks, lighting, street furniture and shade trees. The third component is Intelligent Transportation System (ITS). This will include information kiosks at the transit stops that provide "real time" information on the transit route as well as the time the next vehicle will arrive. An additional ITS improvement will include signal preemption. This will allow the operator to change traffic signals in order to maintain headways. Attached are exhibits that illustrate the two routes and identify capital and operational costs.



# DDA DOWNTOWN 2ND STREET/ANDREWS/3RD RAIL LINK





## DOWNTOWN LIGHT RAIL PROJECT

### Transit Components

1. Rail 2<sup>nd</sup> Street/Las Olas (East/West) and Andrews/3<sup>rd</sup> Avenue (North/South)
2. Pedestrian Streetscape Improvements
3. Intelligent Transit System

### Capital Costs

|                                      |                     |
|--------------------------------------|---------------------|
| 1. 2 <sup>nd</sup> Street / Las Olas | \$12,000,000        |
| 2. Andrews/3 <sup>rd</sup> Avenue    | \$26,800,000        |
| Total                                | <u>\$38,800,000</u> |

### Funding

|             |  |
|-------------|--|
| 50% Federal | \$19,400,000 (new start 50:50 match over multiple years) |
| 50% Local   |  |
| FDOT        | \$9,700,000  |
| DDA         | \$9,700,000  |
| Total       | <u>\$38,800,000</u>                                      |

### Operational Costs (Must have 20 Year commitment)

|                                    |   |
|------------------------------------|---|
| 1. 2 <sup>nd</sup> Street/Las Olas | \$664,300 (11 am –1 am daily with a 10 minute headway)  |
| 2. Andrews/3 <sup>rd</sup> Avenue  | \$811,200 (7 am- 7 pm weekdays with a 9 minute headway) |
| Total                              | <u>\$1,475,500</u> (annual cost)                        |



## EXHIBIT 2

564

1 (41) Triangle Transit Authority, North Caro-  
 2 lina—Regional Rail Project.

3 (42) Washington County, Oregon—Commuter  
 4 Rail.

5 (43) Wasilla-Girdwood, Alaska—Commuter  
 6 Rail.

→ 7 (c) ALTERNATIVES ANALYSIS AND PRELIMINARY EN-  
 8 GINEERING.—The following projects are authorized for al-  
 9 ternatives analysis and preliminary engineering for fiscal  
 10 years 2004 through 2009 under paragraphs (1)(B),  
 11 (2)(A), and (2)(B)(ii) of section 5309(m) of title 49,  
 12 United States Code:

13 (1) Albuquerque—High Capacity Corridor.

14 (2) Belen-Santa Fe—New Mexico Commuter  
 15 Rail.

16 (3) Ann Arbor/Detroit—Commuter Rail.

17 (4) Atlanta—GRTA I-75 Corridor, Wade  
 18 Green Road-Akers Mill Road BRT/HOV.

19 (5) Atlanta—North Line Corridor expansion  
 20 project.

21 (6) Atlanta—Belt Line C-Loop.

22 (7) Atlanta—West Line Corridor.

23 (8) Austin—San Antonio I-35 Commuter Rail.

24 (9) Austin—Rapid Bus Project.

25 (10) Austin—Regional Commuter Rail.



567

- 1 (42) Denver—United States Route 36 Transit
- 2 Corridor.
- 3 (43) Denver—North Metro Corridor to Thorn-
- 4 ton.
- 5 (44) Denver—East Corridor to DIA Airport.
- 6 (45) Detroit—Center City Loop.
- 7 (46) District of Columbia—Light Rail Starter
- 8 Line.
- 9 (47) Fairfax County, Virginia—Bus Rapid
- 10 Transit/HOV.
- 11 (48) Fitchburg, Massachusetts—Commuter
- 12 Rail Extensions and Improvements.
- 13 (49) Fort Lauderdale—Downtown Rail Link.
- 14 (50) Fort Worth—Trinity Railway Express
- 15 Commuter Rail Extensions.
- 16 (51) Fresno—Transit Corridor.
- 17 (52) Galveston—Rail Trolley Extension
- 18 (53) Grand Rapids—Fixed Guideway Corridor
- 19 Project.
- 20 (54) Guam—Tumon Bay-Airport Light Rail.
- 21 (55) Harrisburg—Corridor One Commuter Rail
- 22 (MOS-2), East Mechanicsburg-Carlisle, Pennsyl-
- 23 vania.
- 24 (56) Honolulu—Downtown BRT.



SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY  
PLANNING AND TECHNICAL ADVISORY COMMITTEE (PTAC)  
MEETING: JULY 21, 2004

AGENDA ITEM REPORT

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☒ Information Item      ☐ Presentation

JUPITER CORRIDOR ALTERNATIVES ANALYSIS UPDATE

SUMMARY EXPLANATION AND BACKGROUND:

On September 26, 2003, the SFRTA Board of Directors approved the South Florida Transit Analysis Plan and directed staff to further develop the Plan and secure the required funding from the appropriate agencies to design, construct and implement the recommended projects. The Jupiter Corridor Project is one of the projects recommended in the Transit Analysis Plan and was also identified in Tri-Rail's Master (2020) Plan.

During the month of November 2003, staff issued a Work Order to Parsons Transportation Group (PTG) to conduct an Alternatives Analysis Study. The purpose of the Jupiter Corridor Alternatives Analysis (AA) Study is to identify and compare the costs, benefits and impacts of a range of transportation alternatives in the linear corridor between the City of West Palm Beach and the Town of Jupiter, including the area between Military Trail, the Florida East Coast (FEC) Railroad Corridor, US 1 and possibly into Martin County. The AA Study is required in order to meet the Federal Transit Administration (FTA) New Starts project justification eligibility.

Since the start of the project, the Project Team, consisting of Parsons Transportation Group & SFRTA staff, has been active in the following key areas of the study: public and stakeholder involvement meetings and activities; data gathering, and the initial analysis of transportation alternatives that includes potential operating scenarios and preliminary capital and operating cost estimates.

Forthcoming efforts include ridership forecasting and analysis, conceptual design of alternatives with station locations, detailed operations plan, capital and operations & maintenance costs, final analysis of alternatives, environmental screening, the identification of funding scenarios and the selection of a Locally-Preferred Alternative (LPA) by the Palm Beach Metropolitan Planning Organization (MPO) and SFRTA Board of Directors. The selection of the LPA was anticipated for July 2004 in order to meet the Federal Transit Administration (FTA) New Starts Project submittal date of August 2004. The FTA would then evaluate the project and provide approval for the SFRTA to advance into Preliminary Engineering (PE) and eventually a Full Funding Grant Agreement (FFGA) with the FTA that would insure FTA financial contribution to the development of the selected alignment and mode.

(Continued on Page 2)

EXHIBITS ATTACHED:      Exhibit 1 – Memo from Parsons Transportation Group  
   Exhibit 2 – Jupiter Corridor Alternatives Analysis Study Area Map



## JUPITER CORRIDOR ALTERNATIVES ANALYSIS UPDATE

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### SUMMARY EXPLANATION AND BACKGROUND (Continued):

One of the key components of completing the Jupiter Corridor AA is to provide a detailed ridership analysis and patronage forecast for the proposed alternatives in the corridor. This analysis can only be done by using the SERPM-V model for statistical analysis, which was created and is managed by the Florida Department of Transportation (FDOT) District IV office. In early May 2004, it was brought to staff's attention by the Project Team's consultant, Parsons Transportation Group (PTG), that elements of the SERPM-V model were calibrated incorrectly and therefore were unusable for ridership analysis until the model can be recalibrated and updated. This issue with the region's model was subsequently confirmed in mid-May with FDOT and will cause a certain delay in completing the Jupiter Corridor LPA to the FTA by August 2004.

Staff is currently working with FDOT to rectify the elements of the SERPM-V model that require changes. It is staff's understanding that FDOT's modeling consultants will require until the end of August 2004 to update the model in its entirety. With this timeframe for model updating in place, the schedule for the Jupiter Corridor AA will subsequently be delayed for an additional 3-4 months. It is anticipated that the model will not be available for the Jupiter Corridor AA Project Team until September 2004, pushing the identification and selection of an LPA back to October or November of 2004. As a result of this modeling issue, the Jupiter Corridor will not be evaluated by the FTA until 2005 with a possible recommendation for a FFGA for the 2006 fiscal year. Notwithstanding other factors that will have to be resolved in order to implement the Jupiter Project, such as negotiations with the FEC, this project will potentially be delayed from the scheduled implementation date of 2009 to 2011 for revenue operation.

The Jupiter Corridor Alternatives Analysis Study is evaluating the Bus Rapid Transit along U.S. Highway One or along West Dixie Highway and the extension of the Tri-Rail system (commuter rail) along the FEC Railroad corridor. It is envisioned that 50 percent of the project cost will be funded through the FTA New Starts Funding Program. The remaining 50 percent will have to be secured from local sources such as the state, local governments and the SFRTA. The Palm Beach MPO has already committed \$24.5 million toward the capital costs of the Project.

Staff has recently been informed by FDOT staff that they will be leading a forthcoming Alternatives Analysis (AA) Study of the FEC Corridor in Palm Beach, Broward, and Miami-Dade Counties. From the information we have received so far, it appears that FDOT's FEC AA will proceed in September of 2004. FDOT has requested that the portion of the FEC Corridor being examined as part of the Jupiter Corridor AA be absorbed into their overall Scope of Work for their AA of the corridor. FEC Industries, the owner of the corridor, has also given us indications that they favor and support a regional study of the entire corridor in the three counties rather than in separate segments. Staff is seeking guidance from the Planning and Technical Advisory Committee on how to proceed with this request from FDOT and how it affects the future of the Jupiter Corridor AA.



JUPITER CORRIDOR ALTERNATIVES ANALYSIS UPDATE

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Agency: William 7/9/04  
South Florida Regional Date  
Transportation Authority

Project Manager: Jonathan Roberson 7-9-04  
Jonathan Roberson Date

Chair: Randy Whitfield 7-9-04  
Randy Whitfield Date



## Memorandum

**To:** Bill Boothe  
**From:** David Kurth  
**Date:** April 29, 2004  
**Subject:** Impact of SERPM-V Model Errors on Jupiter Corridor Ridership Projections

As we discussed last Friday, we have found inconsistencies in the coding of the 1999 validation and the 2025 networks for Tri-Rail. These inconsistencies will affect ridership forecasts for the Jupiter Corridor. In addition, while attempting to resolve the inconsistencies, we were made aware of a SERPM-V model calibration error and Federal Transit Administration (FTA) concerns with the SERPM-V model calibration. The coding inconsistencies, model calibration error, and FTA concerns will render any forecasts made with the current version of the SERPM-V model unusable. Nevertheless, in compliance with the direction of the client, we are using the current version of SERPM-V to prepare the alternative travel forecasts for 2025. These forecasts are due to the client by May 3, 2004.

The remainder of this memorandum summarizes the issues along with the expected impacts on travel forecasts, the value (if any) of the forecasts being prepared, the methods and costs to correct the current forecasts, and the schedule for making the corrections. None of the issues are the result of errors or omissions of Parsons. They existed in the SERPM-V model provided by FDOT.

## Issues and Impacts

### *Tri-Rail Network Coding Inconsistencies*

David Adams and Greg Gaides uncovered inconsistencies in the way Tri-Rail network is coded between the West Palm Beach and Miami Airport stations for the model calibration (1999) the future year (2025). This section of the network was included with the SERPM-V model distributed by FDOT and has not been modified by Parsons. The inconsistencies and impacts on modeling are described below.

Distances between existing rail stations are different in the 1999 and 2025 networks even though the stations are not projected to be relocated. The differences in distances between the 1999 and 2025 networks range from -0.47 miles between the Fort Lauderdale / Hollywood Airport and Sheridan stations to 1.9 miles between the Delray and Deerfield Beach stations. Overall, the 2025 Tri-Rail network distance between the West Palm Beach and Miami Airport stations is 2.45 miles greater than the distance coded for 1999.





Impacts: This inconsistency impacts the veracity of the 2025 forecasts. Consistency is crucial to modeling. Changes to input data such as networks should be made only when they are expected to occur. Some change in distances might be expected due to addition and relocation of stations but an overall change in the distance of 2.45 miles seems illogical.

The travel time from the West Palm Beach station to the Miami Airport stations increases significantly from 1999 to 2025, despite the current double-tracking effort. In 1999, the total travel time was modeled as 89.79 minutes. In 2025, the total travel time between the two stations is modeled as 105.49 minutes. According to published Tri-Rail brochures, the double-tracking effort is expected to decrease travel times on the line.

Impacts: There are two primary impacts of this inconsistency. First, the veracity of one of the model runs is tainted. If the 2025 travel time is correct, then the 1999 calibration and validation are called into question. Conversely, if the 1999 travel time is correct, the 2025 model run would produce substantially lower Tri-Rail ridership than would be expected.

The 1999 modeled travel time (89.79 minutes) between the West Palm Beach and Miami Airport stations is about 22 minutes less than the travel time published in the Tri-Rail 2000 timetable (112 minutes). This difference might be reasonable if dwell times at rail stations needed to be added to the modeled travel times. However, a review of the modeling procedures suggests that the dwell times are implicitly included in the coded travel times. It is possible that a coding error was made in the 1999 Tri-Rail network (excluding the dwell times) that was corrected in the coding of the 2025 network. This could explain the differences between the 1999 and 2025 Tri-Rail travel times noted above.

Impacts: This inconsistency calls the 1999 model calibration and validation into question. The networks should be coded to represent some reasonable degree of consistency with the "real world."

### ***SERPM-V Model Calibration Error***

In 2003, AECOMConsult and The Corradino Group recalibrated and validated the SERPM-V model to address concerns raised by the FTA regarding consistency in modeling of travel by households with different auto ownership levels. Parsons requested and received the recalibrated model to help ensure that travel forecasts performed for the Jupiter Corridor would pass FTA scrutiny. The 2003 model recalibration included a revision to the Miami-Dade County transportation analysis zones (TAZs) performed by another consulting firm. Unfortunately, at least one crucial file used by the mode choice model was not updated during the TAZ revision. This omission resulted in the Miami CBD being represented to the mode choice model in an apartment complex somewhere in west Dade County.

Impacts: This error renders the current version of the full SERPM-V model unusable for travel forecasts. The error directly affected the magnitude of the calibrated mode choice model constants and the sensitivity of the mode choice model. FTA would reject any travel forecasts performed using the current version of the SERPM-V model.



### ***FTA Concerns Regarding the SERPM-V Mode Choice Model Calibration***

In their reviews of models for New Starts submittals, especially since the Summit program has been required for analysis of the results, FTA has become concerned that many mode choice models include far too many geographic and alternative specific constants. This makes the models relatively insensitive to system changes. Based on conversations with Jeff Bruggeman of AECOMConsult, the FTA has included the SERPM-V mode choice model in the group of models with too many constants.

Impacts: Since FTA must approve models used for New Starts submittals, forecasts prepared with the current version of the SERPM-V mode choice model would have to be rerun, even if the TAZ coding error had not been made. The reduction of the number of model constants should have the impact of increasing the sensitivity of the model to actual system changes.

### **Value of Travel Forecasts Made Using the Current Networks and Models**

The travel forecasts performed using the current version of the SERPM-V models will have dubious, if any, value. The results will not be valid for forecasts of absolute ridership nor will they be valid for a relative comparison of alternatives. Reasons for these conclusions are outlined below:

#### ***Tri-Rail Network Coding Inconsistencies***

If the network south of the West Palm Beach Station is not modified to be more consistent with the network coded for 1999, the model can be criticized for not taking into account the reduction of travel times expected from the current double tracking effort. However, if the 1999 network is used as a basis and the expected reduction in travel time on the network south of the West Palm Beach Station is taken into account, the model results can be criticized for not being based on realistic travel times (compared to published schedules). These inconsistencies affect the forecast of absolute ridership levels. A relative comparison of alternatives should be possible.

#### ***SERPM-V Model Calibration Error***

This error affects both the forecast of absolute ridership levels and the relative forecast of ridership for alternatives. Since the model was calibrated to reproduce 1999 ridership by mode, the misspecification of the Miami CBD to the mode choice model affected the model constants differently. Constants for modes that provide high levels of service to the Miami CBD (e.g., Tri-Rail and Metrorail) would be affected differently than constants for modes that provide more general service (e.g., local and express bus). As a result, relative ridership forecasts for modal-based alternatives such as TSM versus BRT versus Rail are affected by the model calibration error. Unfortunately, it will be difficult to determine the impact on the different modes without comparative forecasts using the current (incorrect) model and the corrected SERPM-V model.

Since the Miami CBD was incorrectly represented, the impacts of changes in travel to the CBD caused by changes in employment will not be correctly modeled. Likewise, changes in travel to TAZs incorrectly identified as the Miami CBD will be incorrectly forecast. These errors affect the forecasts of absolute ridership for the various alternatives.



## **FTA Concerns Regarding the SERPM-V Mode Choice Model Calibration**

The changes that will be caused by addressing the FTA concerns, like the correction for the model calibration error, affect both the forecast of absolute ridership levels and the relative forecast of ridership for alternatives. The reasons are the same. Reducing the number of constants and recalibrating the constants will change the relative sensitivities of the mode choice model to different travel modes, affecting relative projections for modal-based alternatives. Likewise, the changes to geographic- and socioeconomic-based constants will affect the forecasts of absolute ridership for the various alternatives.

## **Methods and Costs to Correct Forecasts Made Using the Current Networks and Models**

The only certain method for correcting the forecasts made using the current networks and SERPM-V model will be to rerun the forecasts using corrected networks and model. Anything less than this level of effort is certain to be unacceptable to FTA for New Starts submittals and might be unacceptable for the Alternatives Analysis leading to the New Starts analysis.

Several tasks are required to make the corrections:

- 1) Proper and consistent coding of the Tri-Rail network must be performed for the 1999 calibration / validation year and the future forecast year. Distances between stations must be the same for both years unless intermediate stations are added or stations are relocated. Coded rail speeds or travel times must realistically reflect the published Tri-Rail schedule and changes to that schedule assumed to result from the double-tracking effort.
- 2) TAZ coding of the Miami CBD must be corrected for input into the mode choice model.
- 3) The SERPM-V mode choice model must be recalibrated for 1999 based on the corrected network and TAZ information, along with reduction of model constants requested by the FTA. After the mode choice model re-calibration, the full SERPM-V model must be validated for 1999 conditions.
- 4) Once the SERPM-V corrections have been made, the revised model will need to be used to rerun the Jupiter Corridor alternatives. Only relatively minor changes to the network coding should be required (i.e., to transfer the coding of the Jupiter Corridor alternatives into the revised 2025 regional networks).

Tasks 2 and 3 above are being performed by AECOMConsult and The Corradino Group under separate contract to FDOT. While Parsons uncovered the Tri-Rail network coding inconsistencies, Task 1 should also be performed by AECOMConsult and The Corradino Group since the corrections will directly impact their model recalibration efforts.

Task 4 can be performed by Parsons as an extra-cost item since the model runs are currently being performed in compliance with the client's direction. The costs to rerun and summarize the model results should be reduced from those for a full model run since the alternative networks specific to the Jupiter Corridor will already be coded. The network alternatives will only need to be copied into the revised regional networks that should be provided with the revised SERPM-V model.

Roughly three person-days of modeler effort should be assigned to each required rerun of the model. This time will cover required network coding (blending) efforts, performance of the



actual model runs, QA/QC review of the coding of the network and resulting forecasts, and summary of the model results. Thus, for the no-build, TSM, BRT, and build alternatives, 12 person-days will be required for the actual model application and summary. In addition, three person days of time should be allocated for overall administrative, technical review, and reporting. Thus, the additional costs to rerun the model for the no-build and three alternatives should be approximately \$12,000.

## **Schedule**

Unfortunately, the schedule is dependent upon the model re-calibration and validation process being performed by AECOMConsult and The Corradino Group. The effort is currently awaiting approval of funding by Shi-chiang Li of FDOT. Once the revised models have been received by Parsons, it should take approximately two weeks to recode, rerun, and check the revised forecasts.



